October 2022 ISSUE NO. 619



The Raleigh Amateur Radio Society's

ECITER

GET INVOLVED

- RARS General Membership meeting: Second Tuesday of the month.
- The RARS net meets every night except Saturday @ 8 p.m. on 146.640.
- The RARS Technical & Trader's net: Saturdays
 8:00 PM on 146.64.
- RARS meets for a monthly dinner on the First Tuesday of each month.
- On the fourth Tuesday of every month, in-person meeting at Ridge Road Baptist Church where there will be project tables, demos, snacks, and socializing.



PUBLIC SERICE EVENTS

Interested in helping? Visit https://www.rars.org/public-service.php

frequently for our 2022 ham public service schedule.

RARS General Meeting

Main Topic: RARS Officers nominations

& Esperanto and Amateur Radio

By: Election committee & Murray

Merner, K4MHM

Date: October 11, 2022

Time: Meeting at 7:30 PM, informal

gathering at 7PM on Zoom.

Where: Zoom

RARS In Person Meeting

Date: October 27, 2022

Where: Ridge Road Baptist Church

Time: 7:00 PM

On the fourth Tuesday of every month. In-person meeting at Ridge Road Baptist Church where there will be project tables, demos, snacks, and socializing.

RARS Officers

PRESIDENT

John Honeycutt N8ZU 919.417.2477 jfh49@bellsouth.net

VICE PRESIDENT

Tom Lewis N4TL N4TL2@yahoo.com

SECRETARY

Mark Kilmer KM4JRH 919.676.0110 mark.kilmer@gmail.com

TREASURER

Greg Seamster KE4PAX 919.859.0029 KE4PAX@arrl.net



The Raleigh Amateur Radio Society

The Raleigh Amateur Radio Society, Inc. (RARS) was founded in 1969 and continues to serve and support the amateur radio community in the greater Triangle area. In 1999, the society incorporated a new RARS and obtained 501(c)(3) non-profit tax status.

The objectives of the club are to promote worldwide friendship through amateur radio; to be of public service by providing radio communications in times of disaster, emergency, or civic needs; to educate members in radio technique, and to provide training classes to assist in obtaining amateur radio licenses.

Anyone interested in amateur radio is eligible to apply for membership. Regular dues for licensed amateurs are \$18 per year. (From July 1 through June 30.) Additional licensed immediate family members pay \$5 each per year. Dues for licensed full time students and licensed seniors 60 and over are \$12 per year. Unlicensed individuals may become associate members for \$9 per year. Applications for membership are available from the treasurer or on the RARS web site.

https://www.rars.org

Exciter

The Exciter is the official newsletter of the Raleigh Amateur Radio Society. It appears each month as a PDF on the RARS website at www.rars.org. Members receive email notification when the latest version is available. Please provide your email address to the Treasurer.

The Exciter welcomes articles, advertisements, and other contributions. To submit a piece to the newsletter, please contact the Editor. The Editor reserves the right to edit any and all pieces. The submission deadline for each month's Exciter is the Saturday that is ten days before the general meeting. All submissions must be final. Drafts are not accepted.

The views expressed in the Exciter are those of the individual authors and do not necessarily reflect the views of the Editor or RARS.

Tom Lewis, N4TL, editor (editor@rars.org)

September 13, 2022 RARS meeting

The meeting was held on Zoom. Many members connected from 7PM on. President John Honeycutt, N8ZU, ran the formal part of the meeting. <u>Click here</u> to jump to the meeting minutes. Chuck Till, K4RGN, gave a presentation about "6 things hams were taught that aren't true". The presentation slides are located at this URL.

https://www.rars.org/exciters/2022/Things_hams_were_taught_that_aren't_true.pdf

6 things hams were taught that aren't true

Chuck Till, K4RGN September 13, 2022

Reviewed for accuracy by a Physics professor at NC State

Why does this happen?

- Often, science makes new discoveries
 - But old books stay in circulation
- Some educators and authors oversimplify
- Some educators and authors are misinformed

Our hobby depends on a basic understanding of electrons, electromagnetic radiation, etc

September 13, 2022 RARS meeting

Larry K4LXV Raleigh Dan K4LIF DURHAM Tom Lewis, N4TL, Raleigh Daniel - KD4UNX (was KQ4CD... Lee N4WYE Mark - KM4JRH - Raleigh (Host) Dave K4DME Chuck K4RGN Raleigh (Co-host) Louis K4BYN Dave W4YDY, Greenville, NC John Honeycutt N8ZU Raleigh Marc W4MPS Clayton David K4DBZ Wake Forest Tadd (KA2DEW) in n. Raleigh NC Mike KN4DRN Dick KD4ISC Chuck, K4HF - Raleigh MS Mike Salmi, AE4IM Fuguay Doug N3LTV Raleigh NC KS9F Don Murray, K4MHM, Raleigh, NC Doug Sweet, Erie, PA N4BJH Joe Wake Forest Alan AB4OZ RALEIGH Douglas Hall K4DSP N4GEB Bob Andrew KJ4WRC Apex Eric - NR40 - Cary RK Richard K7RLH Apex Barry NC4AZ Cary Ernie NC4EW Oak Ridge, NC Richard Kroeger N1FUA Apex Ben Davis KN4RFT Howard, N4KYW roger k4klk Bill Weinel - W4WHW Jack K8TO Denver Roy KT4EM, Raleigh Bob Starkenburg, W4TTX, Ralei... jc jones kk4vus wendell nc Steve W4MGT Raleigh Brantley K4CBW Jeremy Lindsley (K2HJX) Tom - K2UCU Bruce W8TWT Raleigh Jerry KE4TTS Cary, NC Tom NC4TS Lake Royale CD Carl Davis W8WZ Jim KM4WRK, Raleigh Tyler KO4BZA Charles KM4AMT- Raleigh Joe Spears AF1E Conover W3WZN-13 Charles WB4DCM Raleigh K4ACS-Smitty/Raleigh NC Wilbur WD4RDT Chris N3CS Raleigh

60 people attended the zoom meeting

Ken, KI4OTO, Ral. NC

Curt Phillips W4CP

Will KQ4CDN Durham

Fourth Tuesday RARS Monthly Event

Each fourth Tuesday we have the RARS Gathering at the Ridge Road Baptist Church starting at 7pm. The church is at 2011 Ridge Road, Raleigh. Every month the RARS Gathering will include hands on demos of old and new ham radio and an extended social period. Members and non-members are welcome. This is the event you want to attend in order to find out about the local ham community, to meet other ham radio operators, see our equipment, get on the air, and exchange your ideas with our ideas in a fun forum.

September 27, 2022



Campbell Rush, KQ4BNI, 2 boys; Daniel



Sam Harris, KQ4AQJ Tony O'Conner, K1OC



Dennis Mason, WZ0Q; Campbell Rush, KQ4BNI; Don Brown, KQ4DDT Dennis helping with a handheld setup



Jim Seaman, KO4ZHO; Nancy Torborg, KB2TNR Renard Della Fave, KC4AQC

September 27, Fourth Tuesday RARS Monthly Event, continued



Doug Wall, N3LTV; Richard Kroeger, N1FUA

Doug checking his antenna



Caleb and Hudson on HF.

Hudson, age 10, making his first contact on HF.

Thanks to N3LTV for bringing in his radio to run the GOTA station.

Future RARS Meeting Topics

Titles, topics, and speakers subject to change.

Date	Topic	Presenter
10/11/2022	RARS Officers nominations & Esperanto and Amateur Radio	Election committee & Murray Merner, K4MHM
11/8/2022	RARS Officers election and Show and Tell	Election committee & members
12/13/2022	RARS Officers induction & Parks On the Air activation.	Election committee & Ben Davis, KN4RFT

During the Zoom meetings please keep your microphone muted. Please edit your name so your Name, Call and Location are shown.

September 2022 RARS net report

Thirty, 2 meter nets
415 checkins, 812 minutes

73 Julie Royster, KT4JR

RARS Member Birthdays

Raleigh	AC5JW	10/
David	KN4OBW	10/
Scott	AB4SL	10/01
Chris	W4CEC	10/01
Kathryn	KM4RNE	10/01
Pete	K4PHS	10/02
Jerry	W2GLA	10/02
Jay	KM4EP	10/02
Dave	K4SAN	10/02
Olivia	KG4IYI	10/02
Karl	K4LNX	10/03
Corky	W2AAT	10/06
Kathleen	KA2SBC	10/06
Todd	AG4AY	10/08
Rick	KA3PSK	10/09
Andrew	KJ4WRC	10/09
Gale	K4GGB	10/10
Tony	KJ7LT	10/10
Frank	KY4W	10/11
Bob	W2IKN	10/11
Jeff	KK4KLZ	10/12
Pamela	KM4WRN	10/13
David	WA4DAG	10/14
David	KO4NTB	10/15
Jimmy	K4JIC	10/15
Donnie	KO4FWI	10/16
Rick	KO4JMZ	10/16
Rob	AK4CA 10/17	
Joe	KO4NWW	10/17
Joey	KE4DRJ	10/21
JC	KK4VUS	10/22

K4AAQ	10/22
KD4SOU	10/22
KN4MRV	10/22
W4CP	10/23
KB2MJP	10/24
N9MDS	10/26
W2ROW	10/27
Not Licensed	10/27
K4RGN	10/27
NY4NC	10/28
KC3HNG	10/29
WA2CYM	10/30
KO4SKC	10/31
	KD4SOU KN4MRV W4CP KB2MJP N9MDS W2ROW Not Licensed K4RGN NY4NC KC3HNG WA2CYM

New Members

Renard DellaFave	KC4AQC
Gray Martin	KQ4CWB
Michael Rupert	KY4QX
Mac MacCabe	KQ4AVO



RARS Monthly Supper Effective October 4 NEW LOCATION

All members and guests are welcome to the monthly (first Tuesday) RARS Supper, 6:30PM, at the IHOP Restaurant, 7471 Six Forks Road, Raleigh. The restaurant is on the corner of Sawmill and Six Forks Roads. After entering the restaurant and lobby, move to the left to the glass window enclosed private room. Informal and Dutch, just bring your appetite and best rag to chew.

73,

Chuck, K4HF

RARS Contagious Diseases Policy

"The Raleigh Amateur Society asks that any person to know that they have COVID 19, or other contagious diseases, refrain from attending any in-person RARS event until they are no longer contagious."

RARS Membership links

Use the following link to verify / update your membership profile.

https://www.rars.org/userprofile.php

Use the following link to renew your membership.

https://www.rars.org/membership renewal.php

Free AB4OZ Hamfest, Weather permitting

The free AB4OZ Hamfest will be Saturday, October 15, 2022. Setup at 9AM. Start time is 10AM. New location, Golden Corral Restaurant rear parking lot. 3551 Grenelle street, Raleigh NC 27603.

Check the latest information here QRZ.COM.

HAM RADIO LUNCHEON

Everyone is welcome!

Every Thursday at 11:15 AM, New York Diner, 909 McKnight Drive Knight-dale. https://www.facebook.com/NewYorkDinerNC

Check the latest information on the AB40Z QRZ entry. QRZ.COM.



9/22/2022

Left to right, Howard Goodman, N4KYW; Linda Bloodworth; Charlie Strickland, WA4OSS; Max Bloodworth, KO4TV; Dennis Mason, WZ0Q; Alan Pitegoff, AB4OZ; Chuck Littlewood, K4HF; Bob Chapman, NC1X,



Photos

By

Tom

N4TL

Left to right, Denny Oestreich, KOIBL; Mark Kilmer, KM4JRH; David Guthrie, WA4DAG; Ken Latchum, AD4GX; Glenn Clary, NC4NC; Lauren Libby, W0LD

RARS Portable Operating Group

Organized by Brantley West, K4CBW

On Saturday, September 24th the group met at Jordan Lake Educational State Forest (https://www.ncesf.org/jordanlake.html) from 3-6pm. These events are open to everyone, no license or club affiliation required. Two meter simplex is used to find each other at the park, 146.52 MHz. For more information contact Brantley West at this email, cbwest@gmail.com.







RARS Portable Operating Group, continued



Two of the operating positions

16 people attended the event Andrew Hotchkiss, KJ4WRC Brantley West, K4CBW; Chris Marland, KK6GMR Chris Smith, N3CS Daniel L'Hommedieu, KD4UNX Joe Schroedl, KO4TCY John Bowman, N4JMB Justin Yan, KO4KUW Mark Kocher, KB4CNQ Marty Young, W4MY; Matthew Angel, KN4UPT Michael Rupert, KY4QX Pete Slugg, K4PHS Theo Holshouser, KQ4ACU Tom Lewis, N4TL Tony Laszlo, W4BMX



Brantley West, K4CBW, putting up an antenna



Tony Laszlo, W4BMX

RARS Portable Operating Group, continued



Marty Young, W4MY



Marty's station



Chris Marland, KK6GMR & Michael Rupert, KY4QX



Pete Slugg, K4PHS

RARS Portable Operating Group, continued



Chris Smith, N3CS & Daniel L'Hommedieu, KD4UNX



Andrew Hotchkiss, KJ4WRC & John Bowman, N4JMB



Justin Yan, KO4KUW & Matthew Angel KN4UPT & Joe Schroedl, KO4TCY

All Photos By Tom N4TL

CAPACITOR VALUE CONVERSION TABLE

Contributed by Howard A. Goodman, N4KYW

While searching the Internet for something (I can't remember what), I discovered a handy capacitor value conversion table.

Capacitors values can be problematic since, unlike their resistor cousin, capacitance can be expressed with multiple unit names. This chart has become a blessing for my failing visual acuity.

This table may be viewed and downloaded here:

http://www.franciselectrik.com/cap/

Should you decide to re-do this chart in standard 8-1/2 by 11 format, don't keep it a secret. Please share it with the rest of us.

Editor, I copied the contents of the chart and reproduced it here. 73 Tom N4TL

μF	pF	nF	K
1	1000000	1000	105K
0.82	820000	820	824K
0.8	800000	800	804K
0.7	700000	700	704K
0.68	680000	680	684K
0.6	600000	600	604K
0.56	560000	560	564K
0.5	500000	500	504K
0.47	470000	470	474K
0.4	400000	400	404K
0.39	390000	390	394K
0.33	330000	330	334K
0.3	300000	300	304K
0.27	270000	270	274K
0.25	250000	250	254K
0.22	220000	220	224K
0.2	200000	200	204K
0.18	180000	180	184K
0.15	150000	150	154K
0.12	120000	120	124K
0.1	100000	100	104K
0.082	82000	82	823K
0.08	80000	80	803K

μF	pF	nF	K
0.001	1000	1	102K
0.00082	820	0.82	821K
0.0008	800	0.8	801K
0.0007	700	0.7	701K
0.00068	680	0.68	681K
0.0006	600	0.6	601K
0.00056	560	0.56	561K
0.0005	500	0.5	501K
0.00047	470	0.47	471K
0.0004	400	0.4	401K
0.00039	390	0.39	391K
0.00033	330	0.33	331K
0.0003	300	0.3	301K
0.00027	270	0.27	271K
0.00025	250	0.25	251K
0.00022	220	0.22	221K
0.0002	200	0.2	201K
0.00018	180	0.18	181K
0.00015	150	0.15	151K
0.00012	120	0.12	121K
0.0001	100	0.1	101K
0.000082	82	0.082	820K
0.00008	80	0.08	800K

CAPACITOR VALUE CONVERSION TABLE, continued

1			
μF	pF	nF	K
0.07	70000	70	703K
0.068	68000	68	683K
0.06	60000	60	603K
0.056	56000	56	563K
0.05	50000	50	503K
0.047	47000	47	473K
0.04	40000	40	403K
0.039	39000	39	393K
0.033	33000	33	333K
0.03	30000	30	303K
0.027	27000	27	273K
0.025	25000	25	253K
0.022	22000	22	223K
0.02	20000	20	203K
0.018	18000	18	183K
0.015	15000	15	153K
0.012	12000	12	123K
0.01	10000	10	103K
0.0082	8200	8.2	822K
0.008	8000	8	802K
0.007	7000	7	702K
0.0068	6800	6.8	682K
0.006	6000	6	602K
0.0056	5600	5.6	562K
0.005	5000	5	502K
0.0047	4700	4.7	472K
0.004	4000	4	402K
0.0039	3900	3.9	392K
0.0033	3300	3.3	332K
0.003	3000	3	302K
0.0027	2700	2.7	272K
0.0025	2500	2.5	252K
0.0022	2200	2.2	222K
0.002	2000	2	202K
0.0018	1800	1.8	182K
0.0015	1500	1.5	152K
0.0012	1200	1.2	122K
0.001	1000	1	102K

μF	pF	nF	K
0.00007	70	0.07	700K
0.000068	68	0.068	680K
0.00006	60	0.06	600K
0.000056	56	0.056	560K
0.00005	50	0.05	500K
0.000047	47	0.047	470K
0.00004	40	0.04	400K
0.000039	39	0.039	390K
0.000033	33	0.033	330K
0.00003	30	0.03	300K
0.000027	27	0.027	270K
0.000025	25	0.025	250K
0.000022	22	0.022	220K
0.00002	20	0.02	200K
0.000018	18	0.018	180K
0.000015	15	0.015	150K
0.000012	12	0.012	120K
0.00001	10	0.01	100K
0.0000082	8.2	0.0082	829K
0.000008	8	0.008	809K
0.000007	7	0.007	709K
0.0000068	6.8	0.0068	689K
0.000006	6	0.006	609K
0.0000056	5.6	0.0056	569K
0.000005	5	0.005	509K
0.0000047	4.7	0.0047	479K
0.000004	4	0.004	409K
0.0000039	3.9	0.0039	399K
0.0000033	3.3	0.0033	339K
0.000003	3	0.003	309K
0.0000027	2.7	0.0027	279K
0.0000025	2.5	0.0025	259K
0.0000022	2.2	0.0022	229K
0.000002	2	0.002	209K
0.000018	1.8	0.0018	189K
0.0000015	1.5	0.0015	159K
0.0000012	1.2	0.0012	129K
0.000001	1	0.001	109K

Book "Big ear two" by Professor John Kraus

I have been reading this book and find it very interesting. It's all about John Kraus and his life. He worked on many different antennas and many other things. He gave a lecture at Ohio University in 1984. He shows many antennas and demonstrates how they work.

https://www.youtube.com/watch?v=PHUQkXaDqdk

I copied this from the internet.

BIG EAR TWO is a personal, behind-the-scenes account of astronomers, engineers and inventors and of their efforts to probe the cosmos in an attempt to answer the question "Are we alone?". "A book about a pioneer engaged in a great adventure". "Truly inspirational and a wonderful life's adventure story", Amateur Radio Astronomy Journal. "Will be enjoyed by a reader of any age", Physics Today.

73 Tom N4TL

RARS Classifieds

Copied from https://www.rars.org/classifieds.php

The items below were listed within the last 30 days on the RARS website.

Check the RARS Classified List on the RARS website regularly for new items.

Used Alpha Delta DX-EE Parallel Dipole Antenna 40-20-15-10 meters

Posted September 30th, 2022 by: K4PHS

Contact: pete15013@gmail.com

This antenna was installed in the attic of a house I used to own. It has never been installed outdoors.

I have not cut any of the wires, but have only bent them to make adjustments.

A copy of the "manual" will be included.

\$85.00

Misc Ham Radio Gear

Posted September 29th, 2022 by: K4HF

Contact: k4hf@arrl.net

MFJ 989B 2KW 160 to 10 Meters Antenna Tuner - SOLD

Oak Bay LP-11P 1 KW Low Pass Filter \$5

Drake TV-300 TV High Pass Filter \$5

Small capacitor cabinet with caps \$5

Contact me by e mail, preferred, or (919) 872-6555 - Chuck

RARS Classifieds continued

For Sale: Two 4-400A Tubes

Posted September 28th, 2022 by: W1XR

Contact: <u>j_welch@ieee.org</u>

Two Amperex 4-400A power amplifier tubes. Pulls. \$100 for both.

Bencher Paddle

Posted September 23rd, 2022 by: W4BMX

Contact: tonylaszlo@hotmail.com

Black, \$90

Tony

W4BMX

919 961-1813

For Sale - Military Ammunition Chest USAF 25mm 30 Rd. Pelican Ammo Can

Posted September 23rd, 2022 by: W4BMX

Contact: tonylaszlo@hotmail.com

Military Ammunition Chest USAF 25mm 30 Rd. Pelican Ammo Can Plastic

Has (2) 1-1/8" diameter hole and (1) hole for SO-239 to add accessories and antenna.

Please text for pictures. \$65

Regards,

Tony

W4BMX

919 961-1813

For Sale - Triple Mag Mount

Posted September 23rd, 2022 by: W4BMX

Contact: tonylaszlo@hotmail.com

MFJ MFJ-336S - 5 Inch Triple Magnetic Mount Antenna Base - 17 Feet RG-58AU - SO-239 Mount

\$25

Tony

919 961-1813

RARS Classifieds continued

Wanted: Kenwood TS-480SAT

Posted September 23rd, 2022 by: N3HKV

Contact: romanus262@gmail.com

Greetings!

I am seeking a Kenwood TS-480SAT for a remote station set up. Contact me via email or text 412-600-9003

73

Mike

For Sale Knight TR-106, 6M AM transceiver.

Posted September 7th, 2022 by: N4TL

Contact: <u>n4tl2@yahoo.com</u>

For Sale Knight TR-106, 6M AM transceiver. Receive works okay. Transmit puts out about 2 watts. The manual says it should be 15 watts. I have lost interest in it, for sale as is. Looks good, no rust. It has an amplified microphone from some other radio. The push to talk on it does not work. The cabinet needs a good cleaning or repainting. Includes a crystal for 50.4 MHZ, an AC power cord, a copy of the manual and schematic. Asking \$30.

Contact me on email. 73 Tom N4TL

WANT - Hamstick steel rod

Posted September 3rd, 2022 by: KO4TCY

Contact: <u>joe.schroedl@outlook.com</u>

Looking for a steel rod that goes into the end of a hamstick. I cut mine too short while attempting to tune it. Diameter is around 3/32 inches (0.0960 inches).

Heathkit SB-614

Posted September 2nd, 2022 by: K4RGN

Contact: <u>k4rgn@outlook.com</u>

Heathkit SB-614 station monitor, similar to SB-610 but solid state. Works. Manual will be provided on memory stick. \$90. Contact me by email. Thanks, Chuck.

RARS Board Meeting

Minutes

16 August 2022

Call to Order:

The meeting was called to order at 7:00 P.M. Eastern Time by President John, N8ZU. The following were present: W4CP, AB4OZ, K4HF, W8WZ, KE4PAX, KA2DEW, KB2TNR, K4CBW, K4HM, K4PEX, WA4GIR. KM4JRH, AD4GX, N2FUA, K1OC.

Approval of Minutes:

No minutes to approve.

Tadd updated the group on his 4th Tuesday

Brantley, Noted the next POG at lot to report. Clemmons state park. Question – Asked where for RARS Band Pass filters. Carl provided information as best way to set up for Clemmons.

Nominating Committee – Nominated Chuck – Chuck asked Alan to participate on committee, might not be best person but will help. * chuck will work up the list.

No more new business.

Tom absent but next program is in exciter.

Greg gave treasurers report in including money for 2023 RARSfest. 92 members not renewed. Sent list to John. 9 new members in Jul and Aug. 371 current members.

Jeremy absent

Carl education – don't have a great report. Hoping for new education volunteer to work with broadcasters but no good.

Curt not here

Chuck DeCourt not here – Alan nothing new to report.

DMR repeater belongs to Danny. Still waiting on repeater from Danny.

RARS paying internet at DMR location. * Greg to follow up with chuck on drafting payment. John; can we put sponsorship on RARS web

Alan said have to ask chuck to talk to Danny about that.

Alan to make site visits.

RARS fest chair – not a lot going on. Next big move to work on web page. Ways to reduce expense and increase profits. Wrote a 50 page book on how to run the fest.

Mark take signs to Nancy,

Exciter – on track.

Richard food at last hack meeting and will have at next hack meeting.

ARRL – Chuck nothing further at this time. Checked with Jim Boehner, N2ZZ about what RARS fest could do next. Should apply to NC state convention. Invited Bill Morine, Roanoke vice director.

Joe – No updates.

Hank – has released his updates to the board for review. Having trouble fitting to mobile. Received comments and working through them. Asked about announcement health issues and the gathering from Joe will start having VE at regular RARS meeting.

Tadd – are you happy and Joe do you have a mention. Tadd is reviewing and will send ideas/stuff to Hank. Will get back to Hank. Hank will add dates for VE to bottom of hack page.

Hank – Tony has taken over the *RARSfest* pages completely and is helping with other areas. Hank will step down and Tony will take over. Hank will mentor.

Joe and Tadd provided verbiage to Hank for website.

Nets going as usual. Attend down hope to summer vacation.

Julie – Good if web page to announce his poda events.

Hank out of town. Hank and Tony will work with Brant and update RARS page.)

Youth Brantley – not much on youth with aspect. Conversing with Joe about the NC State shack.

At large – Alan nothing new.

Tadd – Nothing

Ken – No report

Old Business:

Past Action Items:

Tadd will improve the sign-in process.

Complete

Nancy will create a poster with the RARS brochure information.

Complete

Curt will confer with Jeremy as to the possibility of using the PS vests.

Complete

Carl will look into refurbishing existing signs, or procuring new signage.

Complete

Greg will present the proposed budget at the May board meeting.

Complete

Carl will reach out to WCPSS to see if we can get our classroom for fall classes.

Complete

Carl and John will process the paper work to Carl re-assigned the trustee of N4RAL.

Ongoing

Richard will provide food for next weeks meeting at the church.

Complete

Joe will provide Greg contact information for the 13 new HAMs, who will contact them and provide them with the opportunity to take advantage of the free membership offered to new HAMs that tested under Joe.

Complete

All BoD members to look at the current membership application and bring back final suggestions for the form to Hank.

Complete

Hank to update the web page to indicate VE testing will occur on the 4th Tuesday, November, February, May and August.

Complete

New Business:

KA2DEW gave an update on the in-person 4th Tuesday RARS meeting. Meeting attendance seems to be holding and there are loyal attendees. John questioned better advertisement and Carl suggested a larger Facebook presence. Jeremy will take care of making updates. Brantley suggested a number of items from the POG that could be used as projects for the hack meeting. Many agreed with the idea. Logistics, feasibility and such will be discussed in the future.

Carl, N8WZ, motioned that RARS have an official policy requiring anyone who knowingly has COVID 19 refrain from attending any in-person events, until the no longer have COVID 19. Alan, AB4OZ suggested an amendment to said policy. The final policy reads:

"The Raleigh Amateur Radio Society asks that any person who knows that they have COVID 19, or other contagious diseases, refrain from attending any in-person RARS event until they are no

longer contagious."

A vote by the Board passed in favor. The policy will be published in the Exciter and on the website.

Reports:

Vice President Tom, N4TL reported that the meeting program schedule is full until November and Tom is working on ideas for December. The schedule is published in the Exciter.

Treasurer Greg, KE4PAX gave the treasurer's report. He e-mailed his report to the board before the meeting. Greg brought up a donation the club associated with Duke Energy. Rent to the church has been paid.

Secretary Mark, KM4JRH no report.

VE Coordinator Joe, WA4GIR have done 2 Laurel sessions. Testing is going well.

Field Day Chair Curt, W4CP gave us an update on Field Day. Kudos to Brantley for bringing in a large number of people for the GOTA. It was a successful FD. Curt has begun looking for a new place for next year.

There was no Public Service Report.

Education Director Carl, W8WZ reported that Darrell W4CX is interested in becoming the next Ed. Director. He is going to work with Carl on our Fall ham radio license class with a focus on reaching out to folks who work in the Broadcast industry because of Darrell's connections there. We don't have a location yet, but Darrell may find us one at a Broadcaster. The Wake County Community Schools Adult Ed. program is not having in person classes in 2022 so we can't participate in that program as we have in the past.

RARS fest Chair Nancy, KB2TNR gave an update on RARS fest. Nancy reached out to potential RARS Fest exhibitors while at the Dayton Hamvention. Nancy will send out another RARS Fest e-mail reporting on the success of the event. Nancy will be attending other ham fests to promote RARS fest.

Exciter Editor the is going very well. Tom is doing a very good job giving us a wonderful

newsletter that we all appreciate. RARS is very fortunate to have such a good newsletter.

Food Service Chair, Richard N1FUA

Net Manager, Julie NC4JR nets are going well, Julie publishes the Net Reports in each month's Exciter.

Webmaster Hank, K4HM did some updates to the webpage, specifically on the membership application section and our web page is up to date.

Youth Director Brantley, K4CBW reported that the POG is going well. GOTA session at FD was a success.

None of the At Large Directors had reports.

New Action Items:

- Jeremy to make updates to the social media pages.
- Carl will e-mail plans to Tadd for building band-pass filters.
- John will send out a reminder to those who haven't re-upped.

Tom, Hank and Brantley will publish the new infectious disease policy.

Adjournment:

There being no further business the meeting adjourned at 8:00 (a very appropriate time for a ham radio club). The motion was made by Chuck K4HF and Seconded by KB2TNR. The motion carried and the meeting adjourned.

Respectfully Submitted,

Carl Davis, W8WZ

Raleigh Amateur Radio Society Meeting 9 August 2022 Minutes

The meeting was called to order at 7:30 PM Eastern Daylight Time by president N8ZU. The Pledge of Allegiance to the American Flag was said and a quorum was present.

New members, visitors, and guests were introduced. Daniel, KQ4CDO a new ham and visitor and Dan K4LIF a new RARS member were introduced. Our speaker, Rich W4RQ was introduced as well.

The minutes of the July 2022 meeting were unanimously approved. The motion was made Stephen, NY4NC by and seconded by Charles, WB4DCM.

Vice President Tom, N4TL reported that Chuck, K4RGN will be our program next month. His topic will be things that hams were taught that are not true! This will be a very interesting program.

Secretary Mark, KM4JRH reported that there was no secretary's report

Treasurer Greg, KE4PAX was not present but his report was read by N8ZU. We have 366 current total members. We have had 7 new members join in the current fiscal year. We have about \$47,000 in cash assets including the deposit held at the fairgrounds for the next RARS fest and our fixed assets total just under \$31,000 and mostly consists of our repeaters.

Director Alan, AB40Z reported that the Fayetteville Hamfest will be on Saturday 13 August and it is free. The free AB40Z Hamfest will be Saturday, 27 August at the Golden Corral on the south side of Raleigh. Check out AB40Z on QRZ.com to get the latest details on these and other upcoming events.

N8ZU reminded that 11:30 AM each Thursday we have the ham radio lunch at the New York Diner in Knightdale. The first Tuesday of each month is the RARS dinner with details for that on rars.org. It takes place at the Chow Pizza Bar on Creedmoor Road in Raleigh. All are welcome to attend all of these events. Anyone interested in public service should look at the rars.org webpage to see the public service opportunities. The monthly in person meeting will take place at the Ridge Road Baptist Church on the 4th Tuesday of each month at 7 PM. This meeting is an ac-

Membership Meeting Minutes, continued

tivity-based meeting and all are invited.

Youth Director Brantley, K4CBW reported that there is an upcoming RARS portable event on Sunday, 28 August from 4 PM to 6 PM in South Wake County. The exact location is TBD. Contact K4CBW for more details.

Volunteer Examiner Joe, WA4GIR announced that Exams will be given at 7 PM on the $23^{\rm rd}$ of August at the Ridge Road Baptist Church. There is no fee to take the exam. Pre-registration is required. Contact WA4GIR for details at WA4GIR@ARRL.NET

Field Day Chair and Shortwave Scanner SIG Leader Curt, W4CP announced that the shortwave scanner SIG will meet next Monday night. This meeting takes place via zoom. E-mail CURT@W4CP.COM for more information.

Stephen NY4NC announced that a Tech class will take place in Wake Forest. Go to W4CEC.COM to register for the class.

N8ZU also announced that one week from today there is a RARS board meeting via zoom at 7 PM. All RARS members are invited to attend the board meeting. To get the log in info, click the officer's contact link on the RARS webpage and contacting anyone of the directors. Anyone who has an item to add to the agenda for the board meeting should contact N8ZU. Also, if you haven't renewed your RARS membership yet, please do so. We were reminded that it is the policy of RARS that we ask any person who knows that they have COVID-19 or any other contagious disease, refrains from attending an in person RARS meeting or event until they are no longer contagious.

Tom, N4TL introduced our program. The presenter was Rich, W4RQ and the topic was "Small HF Transmitting Loop Antennas". Rich lives in Florida, is a long-time ham, loves CW, and has been published in QST several times. Rich gave a wonderful program and his slide show has been shared with RARS.

After the presentation, the meeting was adjourned at 8:34 PM Eastern Daylight Time. The motion to adjourn was made by Mark, KM4JRH and seconded by Stephen NY4NC and passed unanimously.

Respectfully Submitted,

Carl W8WZ

Raleigh Amateur Radio Society Membership Meeting Minutes 13, September 2022

The meeting was called to order at 7:30 P.M. Eastern Time by RARS President John, N8ZU via zoom.

The pledge of allegiance to the American flag was said. Visitors were introduced and those with upgrades were acknowledged.

John called on Chuck Till, K4RGN, tonight's speaker, to introduce himself.

Approval of minutes was postponed until next meeting.

Vice President Tom, N4TL gave the vice president's report. The October meeting will be officer and board member nominations. Murray Merner, K4MHM will present the program; "Esperanto, as it Relates to Ham Radio." At the November meeting the nomination committee will accept nominations from the members, followed by the election. Show and Tell will also take place at the November meeting.

No Treasurers report was given.

No secretary's report was given.

Director's Reports:

ARRL Liaison, Chuck Littlewood, N4HF added more details about the Lexington Hamfest. And, the $1^{\rm st}$ Tuesday dinner will move back to IHOP.

Director Alan, AB40Z Reported on upcoming swap fests. He noted that local information can be gleaned from his QRZ page.

Youth Director Brantley, K4CBW announced the next Portable Operating event. Mentioned upcoming Jamboree on the Air.

Public Service Director, Jeremy K2HJX applauded the volunteers that worked the New Bern bike event. He also asked for volunteers for upcoming events.

Director Tadd, KA2DEW described the activities happening at the $4^{\rm th}$ Tuesday in person meetings. Announced the upcoming Lexington Hamfest.

Field Day Chair, Curt, W4CP Described the Scanner SI group, and invited anyone to join in.

Jump back to page 3

Membership Meeting Minutes, continued

President John, N8ZU announced that there are pictures and stories from Tadd's Hack Day and the Portable Operating Group in the exciter. Announced that our fiscal year ended in June, when many memberships expire, and invited members to re-up. He also invited members to the BoD meeting next week and indicated that if anyone has something to bring before the Board, to let him know so they can be added to the agenda.

Vice President Tom, N4TL introduced our program for the evening.

The meeting was adjured at 8:47 P.M. Eastern time.

Respectfully Submitted,

Mark Kilmer,

KM4JRH

Secretary RARS

Can you push a belt?

Last month's presentation on "6 Things hams were taught that aren't true", made me think of pushing a rope, cable, chain or a belt. Normally you can't push any of them to move something on the other end.

However, with the invention of the continuously variable transmission (CVT), that changed. This link is to a YouTube video from Weber State University. It shows a 423 piece CVT steel push belt.

https://www.youtube.com/watch?v=PiwRUfFEc5k

CVT operation

https://www.youtube.com/watch?v=c47caRqbbnE

There are many automotive videos from Weber state university on YouTube.

73 Tom N4TL